REMARKS

Petition is hereby made under the provisions of 37 CFR 1.136(a) for an extension of two months of the period for response to the Office Action. Authorization to charge the prescribed fee to our deposit account is enclosed.

The specific withdrawal of several prior rejections is gratefully acknowledged.

The Examiner rejected claims 19 to 22 and 24 to 28 under 35 U.S.C. 102(e) as being anticipated by Murdin et al. (U.S. Patent no. 6,693,087) in the light of WO 92/11361.

Claim 19 has been amended to incorporate the subject matter of claim 20, namely that the immunoprotection-inducing *Chlamydia* protein is the major outer membrane protein of a strain of *Chlamydia*. Claim 20 has been deleted and claims 21 and 22 have been made dependent on claim 19.

The Murdin et al reference, as the Examiner indicated, discloses an expression vector comprising a nucleic acid encoding a *Chlamydia* immunogen, including trachomatis and pneumoniae immunogens, operatively linked to a control sequence in a plasmid.

The nucleic acid molecule in Murdin 6,693,087 encodes a POMP91A protein of a strain of *Chlamydia*. This is a different protein from the MOMP protein to which claim 19 (and previously claim 20) is now limited. Enclosed for the Examiner's consideration is a sequence comparison for the amino acid sequences from the MOMP, POMP91A and InC (included in view of the additional Murdin reference cited below) proteins of *Chlamydia pneumoniae*. The sequence comparison was prepared using the CLUSTAL W (1.83) multiple sequence alignment at the default settings. For the convenience of the Examiner, enclosed are the annoted sequences used to prepare the alignments.

It can be seen that there is no similarity among the three sequences. Accordingly, it is submitted that Murdin 6,693,087 does not anticipate claim 19. The remaining claims are dependent, directly or indirectly, on claim 19, and also are not anticipated.

In the Office Action, the Examiner indicated that the nucleic acid sequence of Murdin et al is "disclosed /defined" to encode a major outer membrane protein of *Chlamydia*, referring to col. 3, lines 60 to 65 and col. 4, lines 1 to 25. It is submitted that this passage does not, in any manner, indicate that the nucleic acid molecule in the vector described in Murdin 6,693,087 encodes MOMP. The passage in question appears in the "Background of the Invention" section of the specification, immediately prior to the "Summary of the Invention" section of the specification which clearly states:

> "The present invention provides purified and isolated DNA molecules encode Chalmydia pneumoniae against POMP191A (SEQ. ID nos.: 1 and 2)

The passages to which the Examiner refers (col. 3, lines 60 to 65 etc), merely state that serovars of *C.trachomatis* are defined on the basis of antigenic variation in MOMP, but published *C.pneumoniae* MOMP gene sequences show no variation between diverse isolates. The passage then goes on to discuss the 76 kDa protein.

It is submitted that this disclosure does not say that the nucleic acid molecule is included in the vector described in Murdin et al.

Accordingly, the rejection of claims 19 to 22 and 24 to 28 under 35 U.S.C. 102(e) as being anticipated by Murdin et al U.S. Patent no. 6,693,087 in the light of WO 92/11361, should be withdrawn.

The Examiner rejected claims 19 to 22 and 24 to 28 under 35 U.S.C. 102(e) as being anticipated by Murdin et al, U.S. Patent no. 6,686,339 in view of WO 92/11361.

Murdin et al U.S.Patent no. 6,686,339 describes, as the Examiner indicates, an expression vector that includes a nucleic acid molecule encoding a Chlamydia immunogen. In this particular Murdin et al reference, the nucleic acid molecule encodes the inclusion membrane protein C of a strain of *Chlamydia pneumoniae*. This specific protein of *Chlamydia* strain does not anticipate the specific *Chlamydia* protein claimed in claim 19, namely the MOMP protein. The Examiner's attention is directed to the sequence comparison enclosed. It will be seen that the inclusion membrane protein C is quite a different protein from MOMP.

In the Office Action, the Examiner states that, in Murdin et al., a nucleic acid molecule is "disclosed/described" to encode a major outer membrane protein of *Chalmydia*. The Examiner's attention is directed to the above discussion of the same disclosure in Murdin et al 6,693,087. The same comments apply here. The vectors of Murdin et al 6,686,339 contain the nucleic acid molecule encoding the inclusion membrane C and no others.

Accordingly, it is submitted that the rejection of claims 19 to 22 and 24 to 28 under 35 U.S.C. 102(e) as being anticipated by Murdin et al U.S. Patent no. 6,686,339 in the regard of WO 92/11361, should be withdrawn.

The Examiner rejected claims 19, 24, 25 and 27 to 28 under 35 U.S.C. 103(a) as being unpatentable over Darji et al (1997) in view of Brey et al U.S.Patent no. 5,919,663.

The rejection did not include claim 20. As noted above, the subject matter of claim 20 has been incorporated into claim 19, thereby obviating the rejection. Having regard to the amendment to claim 19, it is submitted that the rejection of claims 19, 24, 25 and 27 to 28 under 35 U.S.C. 103(a) as being unpatentable over Darji et al in view of Brey et al, should be withdrawn.

It is believed that this application is now in condition for allowance and early and favourable consideration and allowance are respectfully solicited.

Respectfully submitted,

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Enclosures